Washington State Department of Transportation

Long-term Air Transportation Study (LATS)

Draft Statewide Aviation Policies Available For Public Review

The Washington Aviation Planning Council is seeking public input on draft statewide aviation policies, which are being developed as part of the Long-Term Air Transportation Study (LATS). The draft policies are designed to address statewide aviation issues in the areas of land use, environment, capacity, new technology, safety, mobility, stewardship, preservation, access and economy.

The Aviation Planning Council will consider all comments submitted by July 31, 2008 before finalizing the policies. Comments can be submitted by:

- **Mail:** Nisha Marvel, WSDOT Aviation, P.O. Box 3367, Arlington, WA 98223
- **E-mail:** aviation@wsdot.wa.gov
- **Phone:** (360) 651-6300
- **Fax:** (360) 651-6319

What is the Long-Term Air Transportation Study (LATS)?

In 2005, the Governor signed into law Engrossed Substitute Senate Bill (ESSB) 5121, which authorizes a long-term air transportation planning study for general aviation and commercial airports statewide.

The legislation is also known as the Washington State Long-Term Air Transportation Study (LATS). The purpose of LATS is to understand existing capacity in aviation facilities and identify what is needed to meet future demand for air transportation.

LATS is being developed in three phases. Each phase answers one of three basic questions fundamental to the development of a systemwide approach to managing Washington's aviation resources.

Phase I: What do we have?

Performed a statewide airport facilities and capacity assessment, including an analysis of current utilization.

Completed September 2006

Phase II: What do we need?

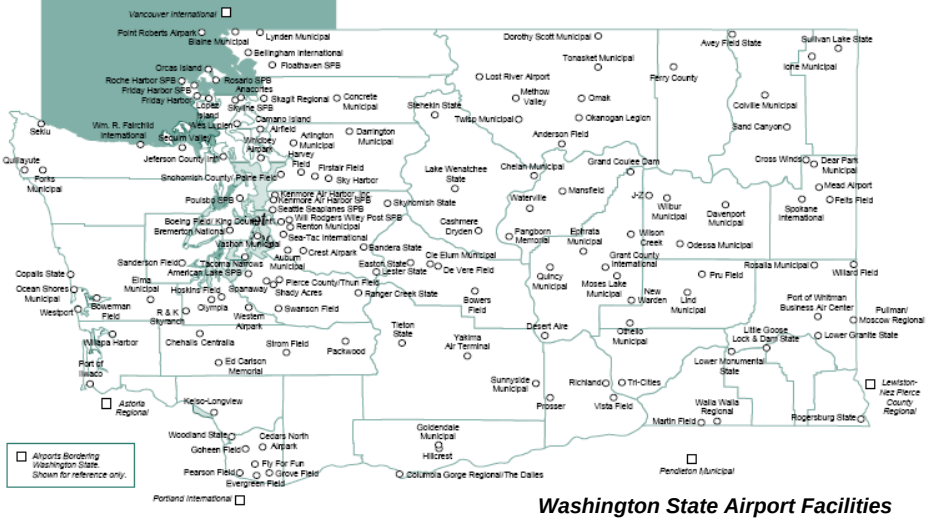
Developed 25-year market forecasts of each airport in Washington State, including forecast of aircraft operations, passengers, and air cargo. In addition, the role of high-speed passenger rail was assessed for its ability to relieve future constraints in aviation system capacity.

Completed July 2007

Phase III: How will we get there?

The Washington State Aviation Planning Council will consider the LATS Phases I and II findings as well as public input. This data and information will be used to shape future aviation policy and recommend how best to meet the state's long-term commercial and general aviation airport needs consistent with ESSB 5121.

To be completed July 2009



Washington State Airport Facilities

Capacity

Did You Know?

- Between 2005 and 2030, passenger boardings at Washington's commercial airports will increase by nearly 90% overall, or by 2.6% per year.
- In all, 86% of passenger traffic moves through Sea-Tac, 10% through Spokane, and all other airports in the state account for the remaining 4% of service.
- Between 2005 and 2030, general aviation operations across the state will grow 1.6% annually, from 3 million to 4.4 million.
- Significant capacity constraints are anticipated by the year 2030:
  - There are about 10 airports in Washington for which airfield capacity shortfalls are expected.
  - Several of the state's busiest airports, including Sea-Tac, Boeing Field, and Harvey Field are expected to approach or reach capacity.
  - Approximately one-quarter of Washington's public use airports are expected to have aircraft storage capacity shortfalls.
- Many of our smaller commercial service airports have lost considerable commercial air service over the last 10-15 years. In many cases these smaller airports are being served by only one carrier, and it is unclear whether those carriers will be able to sustain frequent service to these smaller airports in the future, with high fares and reduced flight frequencies driving passengers instead to hub airports such as Sea-Tac.
- For a variety of reasons, it is very difficult to site new airports or expand existing airports.
- Although many of the decisions about air service are driven by the private sector, the State has determined that there is a strong public interest in assuring that there will be enough aviation capacity to accommodate predicted growth.
- Washington's population is expected to increase by two million by 2025. Historically, growth in population has led to increased demand for commercial, business, freight, recreational and other general aviation activity.

Proposed Policies

Policy 1: The State of Washington must take a lead role in addressing its long-term aviation capacity needs from a system-wide perspective.

Policy 2: The statewide airport classification system developed as part of the Long-term Air Transportation Study should be implemented to help guide decisions on future air transportation needs and investments. The airport classification system groups the state's airports into categories based on their activity level and service role.

Policy 3: Washington State should place a funding and planning priority on maximizing the efficiency and utility of the existing system before considering the creation of new airports.

Policy 4: If Washington State's existing system cannot provide sufficient aviation capacity to meet existing and future demand, it should establish an institutional framework for making appropriate decisions for expansion or siting of aviation facilities.

Technology

Did You Know?

- Emerging technologies, such as global positioning systems (GPS), runway approach instruments, and automated weather reporting, have the potential to play an increasingly important role in increasing aviation safety, supporting greater capacity at airports, and relieving congestion in the air.
- Use of instrument approaches allows for all-weather, 24-hour airport access, which opens the facility to many types of aircraft and supports economic development, emergency medical transportation, and business aviation. Currently, only 63% of commercial service airports, 37% of regional service airports, and 22% of community service airports meet instrument approach performance objectives.
- Although navigation aids are relatively cost effective, their installation may also require other airport improvements, such as longer runways, runway lights, parallel taxiways, and approach lights.

Proposed Policies

Policy 1: Washington State should strongly encourage the application of aviation technologies that improve the accessibility, efficiency, safety, security and environmental sustainability of the state's aviation system.

Stewardship

Did You Know?

- Washington's aviation system is an essential element of our overall state transportation system. Aviation moves people and goods, supports business and commerce, promotes quality of life, and provides access for critical emergency and disaster management services that other transportation modes cannot accommodate.
- Just as highways serve a different purpose than arterials and local streets, different airports are designed to serve different air transportation needs.
- Airport classification systems are used to identify the role of each airport in the state system and to understand the types of facilities and services necessary at each.
- Classifying airports by system role and setting performance objectives for the various airport classes can help with prioritizing airport investments to achieve overall state access, preservation, and safety goals and to enhance air transportation statewide.
- Maintaining pavement condition at airports is a critical issue. Failure to repair pavement at the optimal time can be extremely costly, in both repair cost and loss of system capacity.

Proposed Policies

Policy 1: Maintain and expand the Washington Aviation System Plan (WASP) to include the following:

a. Incorporate economic development studies, aviation forecasts, pavement conditions analysis, capacity analysis, airport facility assessment studies and other studies as appropriate to keep the system plan up-to-date to meet changing conditions in the air transportation system.

b. Periodically re-evaluate Airport Classification System designations for airports to respond to changing conditions and ensure that airport facilities are meeting established performance standards.

c. Maintain a relational database, including physical and operational airport inventory information to support Aviation System Planning and the statewide aviation capital investment program.

d. Provide support and technical assistance at the local level to develop and update airport master plans or airport layout plans consistent with the Washington Aviation System Plan.

Stewardship Continued…

Policy 2: Washington State should ensure that the aviation capital investment program strategically prioritizes system investments necessary to provide for the state's air transportation needs in a cost-effective manner, including:

a. Work with federal, state, local and other aviation interests on funding strategies to address aviation systems gaps and shortfall with the WASP.

b. Expand the State's role to coordinate selection of state projects to complement FAA programs.

c. Guide investments through use of the Airport Classification System and target investments to promote achievement of identified performance measures.

Policy 3: Provide technical assistance to airports and promote methods that optimize the financial return to the airport as consistent with the WASP, airport master plan, and state and federal grant assurances and guidelines.

Policy 4: Support joint public-private partnership and private sector initiatives to provide transportation facilities and services that meet the public's best interest, such that:

- Public expenditures can be reduced,
- Public access to aviation transportation facilities is affordable, and
- The quality, quantity and long-term stability of service is maintained.

Policy 5: Develop access standards so that regional transportation plans and airport master plans promote air transportation access within Washington and to the national and international systems.

Policy 6: Where gaps exist in the aviation system (such as isolated communities, gaps in emergency services, or where there are capacity shortfalls), it may be in the State's interest to operate airports

Mobility

Did You Know?

- Today, all but one percent of the state's residents live within 90 minutes of a Regional Service or a comparable Commercial Service airport.
- Community and Local Service airports serve small to medium sized communities and accommodate a wide range of aviation activity that is important to a community's economic well-being and quality of life.
- Aviation capacity issues are inter-related. For example, congestion in one area can result in spill-over demand and resultant capacity constraints at nearby airports. This means that any capacity solutions at one airport must also be considered in light of the full range of consequences to other parts of the system.

Proposed Policies

Policy 1: Washington's aviation facilities should be planned and operated as an integrated system that meets statewide air transportation demand; complements the overall state transportation system; maximizes the use of existing facilities; and is compatible with the environment.

Policy 2: Promote adequate access to the national air transportation system for all Washington residents, using standards appropriate to the various regions of the state.

Policy 3: Identify transportation needs that extend into adjacent states and promote bi-state/multi modal cooperative solutions to ensure coordinated services and maximum cost effectiveness.

Policy 4: Work with federal, state, regional and local transportation agencies to improve ground access to airports through alternative modes of transportation, consolidation of freight/cargo facilities on airport grounds, and rail and road enhancement projects.

Economy

Did You Know?

- General aviation is defined by the FAA as all aviation other than scheduled commercial aviation and military aviation.
- General aviation provides many essential services across the state, such as business transportation, emergency services and agricultural support to communities.
- Air cargo operations provide an essential service to Washington businesses, by supporting manufacturing shipment, agricultural products shipment, document exchange, and finished goods delivery.
- In today's business environment, which often requires just-in-time delivery of products and goods, swift transportation has become increasingly important to local businesses.

Proposed Policies

Policy 1: Consider state and/or regional economic benefits (such as economic development, job creation, and competitive advantage for local businesses) in the analyses of aviation investments and policy recommendations.

Policy 2: Coordinate with state and local economic development agencies to ensure there are sufficient aviation facilities and capacity to enhance economic growth opportunities across Washington State.

Policy 3: Washington State should strongly encourage and support educational infrastructure to train and educate the skilled workforce necessary to support a technically advanced aviation system that will serve all citizens of the State.

Policy 4: Washington State should encourage public-private partnerships and create incentives to encourage private investment in airport infrastructure and aviation equipment to support sustainable job and business growth of aviation enterprises.

Policy 5: Work with local, regional and state agencies to boost economic development and attract businesses through the development of airport infrastructure and compatible land use initiatives.

Environment

Did You Know?

- Emerging technologies and best practices, which can be used to manage aviation-related environmental repercussions such as surface water runoff and carbon emissions, should be adopted together with conservation and green building practices.
- Habitat preservation is of great importance; however, bird and wildlife habitats located near airport runways may present major safety hazards to passengers and neighborhoods alike.
- Many communities feel adversely impacted by aircraft noise, even though they may benefit economically and socially from the services offered by airports.

Proposed Policies

Policy 1: Washington State should require airports to appropriately mitigate adverse environmental impacts to rare species and habitats occurring at airports, while reducing wildlife attractants that create hazards to airport operations.

Policy 2: Airport facility and operations plans should incorporate environmental policies and management practices, and explore new opportunities to apply sustainable practices, including:

- Energy conservation and use of alternative energy sources
- Waste reduction and recycling
- Impact avoidance and mitigation
- Green building or energy efficient construction methods
- Encouragement of "good neighbor" policies at public use airports using best management practices

Policy 3: Washington State will use incentives and regulation to ensure that its public use airports follow sound environmental protection practices in the construction, maintenance and operation of its systems and facilities. Furthermore, airports should consistently review these indicators to improve their environmental performance.

Policy 4: Incorporate state and federal greenhouse gas emissions reduction policies and strategies within the air transportation system to minimize the adverse health and environmental impacts on air quality and the climate while promoting jobs and economic development in a sustainable manner.

Policy 5: Promote research on greenhouse gas emissions reduction strategies, alternative fuels, and air traffic management procedures for aviation.

Policy 6: Develop statewide and regional strategies to coordinate, develop and provide a range of transportation mode options for access to public use airports through airport and highway design projects.

Land Use

Did You Know?

- Incompatible development around an airport limits the airport's operations, as well as exposing its neighboring communities to noise and other undesirable impacts.
- Conflicting land use presents a major challenge to the viability of airports in Washington:
  - Only 35% of airports are protected by comprehensive plan policies.
  - Only 22% of airports are protected by zoning ordinances.
  - Only 53% of airports have height hazard controls.
- Incompatible development reduces the airspace needed to support advanced technologies, increases conflicts with neighborhoods and reduces safety and capacity of existing facilities.
- Incompatible development impedes airport expansion, which is often required to accommodate future growth.

Proposed Policies

Policy 1: The state should strengthen its legislation to prohibit incompatible land uses and to promote appropriate land uses adjacent to public use airports.

Policy 2: Washington State should use a combination of incentives, legislation and regulatory tools to ensure that local governments address land use requirements to protect airports as essential public facilities, discouraging the encroachment of incompatible land uses adjacent to public use airports.

Policy 3: Develop statewide performance measures to assess how well local comprehensive plan policies and development regulations work in discouraging incompatible development adjacent to public use airports.

Policy 4: The State should prohibit airspace intrusion around airports and runway approach paths by structural, visual, or wildlife hazards that could potentially impact airport operations or endanger the safety and welfare of aviation users.

Policy 5: Regional Transportation Planning Organizations should be given the authority to certify the transportation and land use element of local comprehensive plans to discourage incompatible development adjacent to public use airports and ensure consistency of comprehensive plan components and regulations across jurisdictional boundaries.

Policy 6: Washington State should work towards developing standards to discourage new development of K-12 public schools, daycare centers and medical facilities from locating adjacent to public use airports.

Safety

Did You Know?

- Runway safety areas exist to minimize passenger injuries and aircraft damage and to facilitate recovery if an aircraft were to overshoot or undershoot the runway. While nearly all commercial service and regional service airports in the state meet runway safety performance standards, many of the remaining smaller airports within the state do not.
- It is important that airports have designated airspace for aircraft arrivals and departures that are free of obstructions. Obstructions such as terrain, buildings, trees, or vehicles can be dangerous to aircraft during takeoff or landing if they extend into this protected area.
- A safe aircraft operating environment exists when:
  - Runway safety areas are in compliance with FAA standards.
  - Airfield pavements are in good or excellent condition.
  - No obstacles are in the airport operating environment.
- In general, smaller airports are less successful at meeting safety objectives than larger airports, because they often do not have enough funds to make safety improvements.

Proposed Policies

Policy 1: Washington State should use incentives and state and federal resources to ensure that airport facilities meet applicable federal or state design criteria and safety standards.

Policy 2: Washington State should work with the FAA and regional transportation planning organizations to identify additional airports that can meet federal criteria for the classification of reliever airports between 2008 and 2035.

Policy 3: WSDOT Aviation should work with the State's Emergency Management Division to augment Washington State's Emergency Plan to include strategically located aviation facilities to assist during disasters/emergencies.

Policy 4: Washington State should encourage and support precision instrument approach procedures at all airports with a classification service role of "Regional Service" or higher, and should work towards providing non-precision instrument approach procedures at all airports with a service role of "Community Service" or higher.